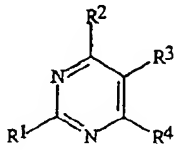
AMENDED CLAIMS
[received by the International Bureau on 04 August 2005 (04.08.2005);
new claims 15-17 added; remaining claims unchanged (6 pages)]

+STATEMENT

What is claimed is:

1. A compound selected from Formula I, an *N*-oxide or an agriculturally suitable salt thereof,



I

wherein

$R^1$ is cyclopropyl optionally substituted with 1–5 $R^5$, isopropyl optionally substituted with 1–5 $R^6$, or phenyl optionally substituted with 1–3 $R^7$;

$R^2$ is $((O)_jC(R^{15})(R^{16}))_kR$;

R is $CO_2H$ or a herbicidally effective derivative of $CO_2H$;

$R^3$ is halogen, cyano, nitro, $OR^{20}$, $SR^{21}$ or $N(R^{22})R^{23}$;

$R^4$ is $-N(R^{24})R^{25}$ or $-NO_2$;

each $R^5$ and $R^6$ is independently halogen, $C_1$–$C_6$ alkyl, $C_1$–$C_6$ haloalkyl, $C_2$–$C_6$ alkenyl, $C_2$–$C_6$ haloalkenyl, $C_1$–$C_3$ alkoxy, $C_1$–$C_2$ haloalkoxy, $C_1$–$C_3$ alkylthio or $C_1$–$C_2$ haloalkylthio;

each $R^7$ is independently halogen, cyano, nitro, $C_1$–$C_4$ alkyl, $C_1$–$C_4$ haloalkyl, $C_3$–$C_6$ cycloalkyl, $C_3$–$C_6$ halocycloalkyl, $C_1$–$C_4$ hydroxyalkyl, $C_2$–$C_4$ alkoxyalkyl, $C_2$–$C_4$ haloalkoxyalkyl, $C_2$–$C_4$ alkenyl, $C_2$–$C_4$ haloalkenyl, $C_3$–$C_4$ alkynyl, $C_3$–$C_4$ haloalkynyl, hydroxy, $C_1$–$C_4$ alkoxy, $C_1$–$C_4$ haloalkoxy, $C_2$–$C_4$ alkenyloxy, $C_2$–$C_4$ haloalkenyloxy, $C_3$–$C_4$ alkynyloxy, $C_3$–$C_4$ haloalkynyloxy, $C_1$–$C_4$ alkylthio, $C_1$–$C_4$ haloalkylthio, $C_1$–$C_4$ alkylsulfinyl, $C_1$–$C_4$ haloalkylsulfinyl, $C_1$–$C_4$ alkylsulfonyl, $C_1$–$C_4$ haloalkylsulfonyl, $C_2$–$C_4$ alkenylthio, $C_2$–$C_4$ haloalkenylthio, $C_2$–$C_4$ alkenylsulfinyl, $C_2$–$C_4$ haloalkenylsulfinyl, $C_2$–$C_4$ alkenylsulfonyl, $C_2$–$C_4$ haloalkenylsulfonyl, $C_3$–$C_4$ alkynylthio, $C_3$–$C_4$ haloalkynylthio, $C_3$–$C_4$ alkynylsulfinyl, $C_3$–$C_4$ haloalkynylsulfinyl, $C_3$–$C_4$ alkynylsulfonyl, $C_3$–$C_4$ haloalkynylsulfonyl, $C_1$–$C_4$ alkylamino, $C_2$–$C_8$ dialkylamino, $C_3$–$C_6$ cycloalkylamino, $C_4$–$C_6$ (alkyl)cycloalkylamino, $C_2$–$C_6$ alkylcarbonyl, $C_2$–$C_6$ alkoxycarbonyl, $C_2$–$C_6$ alkylaminocarbonyl, $C_3$–$C_8$ dialkylaminocarbonyl, $C_3$–$C_6$ trialkylsilyl, phenyl, phenoxy and 5- or 6-membered heteroaromatic rings, each phenyl, phenoxy and 5- or 6-membered heteroaromatic ring optionally substituted with one to three substituents independently selected from $R^{45}$; or

two adjacent $R^7$ are taken together as $-OCH_2O-$, $-CH_2CH_2O-$, $-OCH(CH_3)O-$, $-OC(CH_3)_2O-$, $-OCF_2O-$, $-CF_2CF_2O-$, $-OCF_2CF_2O-$ or $-CH=CH-CH=CH-$;

$R^{15}$ is H, halogen, $C_1$–$C_4$ alkyl, $C_1$–$C_4$ haloalkyl, hydroxy, $C_1$–$C_4$ alkoxy or $C_2$–$C_4$ alkylcarbonyloxy;

$R^{16}$ is H, halogen, $C_1$–$C_4$ alkyl or $C_1$–$C_4$ haloalkyl; or

$R^{15}$ and $R^{16}$ are taken together as an oxygen atom to form, with the carbon atom to which they are attached, a carbonyl moiety;

$R^{20}$ is H, $C_1$–$C_4$ alkyl or $C_1$–$C_3$ haloalkyl;

$R^{21}$ is H, $C_1$–$C_4$ alkyl or $C_1$–$C_3$ haloalkyl;

$R^{22}$ and $R^{23}$ are independently H or $C_1$–$C_4$ alkyl;

$R^{24}$ is H, $C_1$–$C_4$ alkyl optionally substituted with 1–2 $R^{30}$, $C_2$–$C_4$ alkenyl optionally substituted with 1–2 $R^{31}$, or $C_2$–$C_4$ alkynyl optionally substituted with 1–2 $R^{32}$; or $R^{24}$ is $C(=O)R^{33}$, nitro, $OR^{34}$, $S(O)_2R^{35}$, $N(R^{36})R^{37}$ or $N=C(R^{62})R^{63}$;

$R^{25}$ is H, $C_1$–$C_4$ alkyl optionally substituted with 1–2 $R^{30}$ or $C(=O)R^{33}$; or

$R^{24}$ and $R^{25}$ are taken together as a radical selected from $-(CH_2)_4-$, $-(CH_2)_5-$, $-CH_2CH=CHCH_2-$ and $-(CH_2)_2O(CH_2)_2-$, each radical optionally substituted with 1–2 $R^{38}$; or

$R^{24}$ and $R^{25}$ are taken together as $=C(R^{39})N(R^{40})R^{41}$ or $=C(R^{42})OR^{43}$;

each $R^{30}$, $R^{31}$ and $R^{32}$ is independently halogen, $C_1$–$C_3$ alkoxy, $C_1$–$C_3$ haloalkoxy, $C_1$–$C_3$ alkylthio, $C_1$–$C_3$ haloalkylthio, amino, $C_1$–$C_3$ alkylamino, $C_2$–$C_4$ dialkylamino or $C_2$–$C_4$ alkoxycarbonyl;

each $R^{33}$ is independently H, $C_1$–$C_{14}$ alkyl, $C_1$–$C_3$ haloalkyl, $C_1$–$C_4$ alkoxy, phenyl, phenoxy or benzyloxy;

$R^{34}$ is H, $C_1$–$C_4$ alkyl, $C_1$–$C_3$ haloalkyl or $CHR^{66}C(O)OR^{67}$;

$R^{35}$ is $C_1$–$C_4$ alkyl or $C_1$–$C_3$ haloalkyl;

$R^{36}$ is H, $C_1$–$C_4$ alkyl or $C(=O)R^{64}$;

$R^{37}$ is H or $C_1$–$C_4$ alkyl;

each $R^{38}$ is independently halogen, $C_1$–$C_3$ alkyl, $C_1$–$C_3$ alkoxy, $C_1$–$C_3$ haloalkoxy, $C_1$–$C_3$ alkylthio, $C_1$–$C_3$ haloalkylthio, amino, $C_1$–$C_3$ alkylamino, $C_2$–$C_4$ dialkylamino or $C_2$–$C_4$ alkoxycarbonyl;

$R^{39}$ is H or $C_1$–$C_4$ alkyl;

$R^{40}$ and $R^{41}$ are independently H or $C_1$–$C_4$ alkyl; or

$R^{40}$ and $R^{41}$ are taken together as $-(CH_2)_4-$, $-(CH_2)_5-$, $-CH_2CH=CHCH_2-$ or $-(CH_2)_2O(CH_2)_2-$;

$R^{42}$ is H or $C_1$–$C_4$ alkyl;

$R^{43}$ is $C_1$–$C_4$ alkyl;

each $R^{45}$ is independently halogen, cyano, nitro, $C_1$–$C_4$ alkyl, $C_1$–$C_4$ haloalkyl, $C_3$–$C_6$ cycloalkyl, $C_3$–$C_6$ halocycloalkyl, $C_2$–$C_4$ alkenyl, $C_2$–$C_4$ haloalkenyl, $C_3$–$C_4$

alkynyl, $C_3$–$C_4$ haloalkynyl, $C_1$–$C_4$ alkoxy, $C_1$–$C_4$ haloalkoxy, $C_1$–$C_4$ alkylthio, $C_1$–$C_4$ haloalkylthio, $C_1$–$C_4$ alkylsulfinyl, $C_1$–$C_4$ alkylsulfonyl, $C_1$–$C_4$ alkylamino, $C_2$–$C_8$ dialkylamino, $C_3$–$C_6$ cycloalkylamino, $C_4$–$C_6$ (alkyl)cycloalkylamino, $C_2$–$C_4$ alkylcarbonyl, $C_2$–$C_6$ alkoxycarbonyl, $C_2$–$C_6$ alkylaminocarbonyl, $C_3$–$C_8$ dialkylaminocarbonyl or $C_3$–$C_6$ trialkylsilyl;

$R^{62}$ is H, $C_1$–$C_4$ alkyl or phenyl optionally substituted with 1–3 $R^{65}$;

$R^{63}$ is H or $C_1$–$C_4$ alkyl; or

$R^{62}$ and $R^{63}$ are taken together as $-(CH_2)_4-$ or $-(CH_2)_5-$;

$R^{64}$ is H, $C_1$–$C_{14}$ alkyl, $C_1$–$C_3$ haloalkyl, $C_1$–$C_4$ alkoxy, phenyl, phenoxy or benzyloxy;

each $R^{65}$ is independently $CH_3$, Cl or $OCH_3$;

$R^{66}$ is H, $C_1$–$C_4$ alkyl or $C_1$–$C_4$ alkoxy;

$R^{67}$ is H, $C_1$–$C_4$ alkyl or benzyl;

j is 0 or 1; and

k is 0 or 1;

provided that:

(a) when k is 0, then j is 0;

(b) when $R^2$ is $CH_2OR^a$ wherein $R^a$ is H, optionally substituted alkyl or benzyl, then $R^3$ is other than cyano;

(c) when $R^1$ is phenyl substituted by Cl in each of the meta positions, the phenyl is also substituted by $R^7$ in the para position;

(d) when $R^1$ is phenyl substituted by $R^7$ in the para position, said $R^7$ is other than *tert*-butyl, cyano or optionally substituted phenyl;

(e) when $R^1$ is cyclopropyl or isopropyl optionally substituted with 1–5 $R^6$, then R is other than $C(=W)N(R^b)S(O)_2-R^c-R^d$ wherein W is O, S, $NR^e$ or $NOR^e$; $R^b$ is hydrogen, $C_1$–$C_4$ alkyl, $C_2$–$C_6$ alkenyl or $C_2$–$C_6$ alkynyl; $R^c$ is a direct bond or $CHR^f$, O, $NR^e$ or $NOR^e$; $R^d$ is an optionally substituted heterocyclic or carbocyclic aromatic radical having 5 to 6 ring atoms, the radical being optionally condensed with an aromatic or nonaromatic 5- or 6-membered ring; each $R^e$ is independently H, $C_1$–$C_3$ alkyl, $C_1$–$C_3$ haloalkyl or phenyl; and $R^f$ is H, $C_1$–$C_3$ alkyl or phenyl; and

(f) the compound of Formula I is other than diethyl 6-amino-5-nitro-2-phenyl-4-pyrimidinemalonate.

2. The compound of Claim 1 wherein

$R^2$ is $CO_2R^{12}$, $CH_2OR^{13}$, $CH(OR^{46})(OR^{47})$, CHO, $C(=NOR^{14})H$, $C(=NNR^{48}R^{49})H$, $(O)_jC(R^{15})(R^{16})CO_2R^{17}$, $C(=O)N(R^{18})R^{19}$, $C(=S)OR^{50}$, $C(=O)SR^{51}$, $C(=S)SR^{52}$ or $C(=NR^{53})YR^{54}$;

$R^{12}$ is H, -CH{C(O)O$(CH_2)_m$}, -N=C($R^{55}$)$R^{56}$; or a radical selected from $C_1$–$C_{14}$ alkyl, $C_3$–$C_{12}$ cycloalkyl, $C_4$–$C_{12}$ alkylcycloalkyl, $C_4$–$C_{12}$ cycloalkylalkyl, $C_2$–$C_{14}$ alkenyl, $C_2$–$C_{14}$ alkynyl and phenyl, each radical optionally substituted with 1–3 $R^{27}$; or

$R^{12}$ is a divalent radical linking the carboxylic ester function $CO_2R^{12}$ of each of two pyrimidine ring systems of Formula I, the divalent radical selected from -$CH_2$-, -$(CH_2)_2$-, -$(CH_2)_3$- and -$CH(CH_3)CH_2$-;

$R^{13}$ is H, $C_1$–$C_{10}$ alkyl optionally substituted with 1–3 $R^{28}$, or benzyl;

$R^{14}$ is H, $C_1$–$C_4$ alkyl, $C_1$–$C_4$ haloalkyl or benzyl;

$R^{17}$ is $C_1$–$C_{10}$ alkyl optionally substituted with 1–3 $R^{29}$, or benzyl;

$R^{18}$ is H, $C_1$–$C_4$ alkyl, hydroxy, $C_1$–$C_4$ alkoxy or $S(O)_2R^{57}$;

$R^{19}$ is H or $C_1$–$C_4$ alkyl;

each $R^{27}$ is independently halogen, cyano, hydroxycarbonyl, $C_2$–$C_4$ alkoxycarbonyl, hydroxy, $C_1$–$C_4$ alkoxy, $C_1$–$C_4$ haloalkoxy, $C_1$–$C_4$ alkylthio, $C_1$–$C_4$ haloalkylthio, amino, $C_1$–$C_4$ alkylamino, $C_2$–$C_4$ dialkylamino, -CH{O$(CH_2)_n$} or phenyl optionally substituted with 1–3 $R^{44}$; or

two $R^{27}$ are taken together as -OC(O)O- or -O(C($R^{58}$)($R^{58}$))$_{1-2}$O-; or

two $R^{27}$ are taken together as an oxygen atom to form, with the carbon atom to which they are attached, a carbonyl moiety;

each $R^{28}$ is independently halogen, $C_1$–$C_4$ alkoxy, $C_1$–$C_4$ haloalkoxy, $C_1$–$C_4$ alkylthio, $C_1$–$C_4$ haloalkylthio, amino, $C_1$–$C_4$ alkylamino or $C_2$–$C_4$ dialkylamino; or

two $R^{28}$ are taken together as an oxygen atom to form, with the carbon atom to which they are attached, a carbonyl moiety;

each $R^{29}$ is independently halogen, $C_1$–$C_4$ alkoxy, $C_1$–$C_4$ haloalkoxy, $C_1$–$C_4$ alkylthio, $C_1$–$C_4$ haloalkylthio, amino, $C_1$–$C_4$ alkylamino or $C_2$–$C_4$ dialkylamino;

each $R^{44}$ is independently halogen, $C_1$–$C_4$ alkyl, $C_1$–$C_3$ haloalkyl, hydroxy, $C_1$–$C_4$ alkoxy, $C_1$–$C_3$ haloalkoxy, $C_1$–$C_3$ alkylthio, $C_1$–$C_3$ haloalkylthio, amino, $C_1$–$C_3$ alkylamino, $C_2$–$C_4$ dialkylamino or nitro;

$R^{46}$ and $R^{47}$ are independently $C_1$–$C_4$ alkyl or $C_1$–$C_3$ haloalkyl; or

$R^{46}$ and $R^{47}$ are taken together as -$CH_2CH_2$-, -$CH_2CH(CH_3)$- or -$(CH_2)_3$-;

$R^{48}$ is H, $C_1$–$C_4$ alkyl, $C_1$–$C_4$ haloalkyl, $C_2$–$C_4$ alkylcarbonyl, $C_2$–$C_4$ alkoxycarbonyl or benzyl;

$R^{49}$ is H, $C_1$–$C_4$ alkyl or $C_1$–$C_4$ haloalkyl;

$R^{50}$, $R^{51}$ and $R^{52}$ are H; or a radical selected from $C_1$–$C_{14}$ alkyl, $C_3$–$C_{12}$ cycloalkyl, $C_4$–$C_{12}$ alkylcycloalkyl, $C_4$–$C_{12}$ cycloalkylalkyl, $C_2$–$C_{14}$ alkenyl and $C_2$–$C_{14}$ alkynyl, each radical optionally substituted with 1–3 $R^{27}$;

Y is O, S or $NR^{61}$;

$R^{53}$ is H, $C_1$–$C_3$ alkyl, $C_1$–$C_3$ haloalkyl, $C_2$–$C_4$ alkoxyalkyl, OH or $C_1$–$C_3$ alkoxy;

$R^{54}$ is $C_1$–$C_3$ alkyl, $C_1$–$C_3$ haloalkyl or $C_2$–$C_4$ alkoxyalkyl; or

$R^{53}$ and $R^{54}$ are taken together as $-(CH_2)_2-$, $-CH_2CH(CH_3)-$ or $-(CH_2)_3-$;

$R^{55}$ and $R^{56}$ are independently $C_1$–$C_4$ alkyl;

$R^{57}$ is $C_1$–$C_4$ alkyl, $C_1$–$C_3$ haloalkyl or $NR^{59}R^{60}$;

each $R^{58}$ is independently selected from H and $C_1$–$C_4$ alkyl;

$R^{59}$ and $R^{60}$ are independently H or $C_1$–$C_4$ alkyl;

$R^{61}$ is H, $C_1$–$C_3$ alkyl, $C_1$–$C_3$ haloalkyl or $C_2$–$C_4$ alkoxyalkyl;

m is an integer from 2 to 3; and

n is an integer from 1 to 4.

3. The compound of Claim 2 wherein $R^3$ is halogen.

4. The compound of Claim 2 wherein $R^1$ is cyclopropyl or phenyl substituted with a halogen, methyl or methoxy radical in the para position and optionally with 1–2 radicals selected from halogen and methyl in other positions; and $R^4$ is $-N(R^{24})R^{25}$.

5. The compound of Claim 4 wherein $R^2$ is $CO_2R^{12}$, $CH_2OR^{13}$, CHO or $CH_2CO_2R^{17}$.

6. The compound of Claim 5 wherein $R^{24}$ is H, $C(O)R^{33}$ or $C_1$–$C_4$ alkyl optionally substituted with $R^{30}$; $R^{25}$ is H or $C_1$–$C_2$ alkyl; or $R^{24}$ and $R^{25}$ are taken together as $=C(R^{39})N(R^{40})R^{41}$.

7. The compound of Claim 6 wherein $R^2$ is $CO_2R^{12}$; and $R^{24}$ and $R^{25}$ are H.

8. The compound of Claim 7 wherein $R^{12}$ is H, $C_1$–$C_4$ alkyl or benzyl.

9. The compound of Claim 1 selected from the group consisting of:
methyl 6-amino-5-bromo-2-cyclopropyl-4-pyrimidinecarboxylate,
ethyl 6-amino-5-bromo-2-cyclopropyl-4-pyrimidinecarboxylate,
phenylmethyl 6-amino-5-bromo-2-cyclopropyl-4-pyrimidinecarboxylate,
6-amino-5-bromo-2-cyclopropyl-4-pyrimidinecarboxylic acid monosodium salt,
methyl 6-amino-5-chloro-2-cyclopropyl-4-pyrimidinecarboxylate,
phenylmethyl 6-amino-5-chloro-2-cyclopropyl-4-pyrimidinecarboxylate,
6-amino-5-chloro-2-cyclopropyl-4-pyrimidinecarboxylic acid monosodium salt,
ethyl 6-amino-5-chloro-2-cyclopropyl-4-pyrimidinecarboxylate,
methyl 6-amino-5-chloro-2-(4-chlorophenyl)-4-pyrimidinecarboxylate,
ethyl 6-amino-5-chloro-2-(4-chlorophenyl)-4-pyrimidinecarboxylate,

6-amino-5-chloro-2-(4-chlorophenyl)-4-pyrimidinecarboxylic acid,
ethyl 6-amino-2-(4-bromophenyl)-5-chloro-4-pyrimidinecarboxylate,
methyl 6-amino-2-(4-bromophenyl)-5-chloro-4-pyrimidinecarboxylate, and
6-amino-2-(4-bromophenyl)-5-chloro-4-pyrimidinecarboxylic acid.

10. A herbicidal mixture comprising a herbicidally effective amount of a compound of Claim 1 and an effective amount of at least one additional active ingredient selected from the group consisting of an other herbicide and a herbicide safener.

11. A herbicidal mixture comprising synergistically effective amounts of a compound of Claim 1 and an auxin transport inhibitor.

12. A herbicidal composition comprising a herbicidally effective amount of a compound of Claim 1 and at least one of a surfactant, a solid diluent or a liquid diluent.

13. A method for controlling the growth of undesired vegetation comprising contacting the vegetation or its environment with a herbicidally effective amount of a compound of Claim 1.

14. A herbicidal composition comprising a herbicidally effective amount of a compound of Claim 1, an effective amount of at least one additional active ingredient selected from the group consisting of an other herbicide and a herbicide safener, and at least one of a surfactant, a solid diluent or a liquid diluent.

15. A compound which is 2-cyclopropyl-1,6-dihydro-6-oxo-4-pyrimidinecarboxylic acid.

16. A compound which is 5-chloro-2-cyclopropyl-1,6-dihydro-6-oxo-4-pyrimidine-carboxylic acid.

17. A compound which is 5,6-dichloro-2-cyclopropyl-4-pyrimidinecarboxylic acid